

REMARKS

Claims 1 to 31 are pending. Claims 32 to 66 have been withdrawn from consideration. Claim 1 is currently amended. Reconsideration of the application is requested.

§ 103 Rejections

Claims 1-15, 17, 20-24, 27-31 stand rejected under 35 USC § 103(a) as being unpatentable over Verhoog (U.S. 6,296,968 B1) in view of Brinkman et al. (U.S. 4,007,315).

As asserted by the Examiner, Verhoog teaches each of the electrochemical cells comprising opposing first and second planar surfaces and being subject to volumetric changes during cycling with a unitary cooling tank formed of a polypropylene tank formed of plastic material and having an inlet fluid orifice and an outlet fluid orifice, the cooling bladder having a substantially flat shape and circulates liquid between the inlet and outlet. However, the Verhoog reference does not disclose a deformable bladder. The Brinkman et al. reference discloses a cooling bladder made of plastic preferably polyethylene because of its relatively good heat conductivity accompanied by high specific conductivity.

The Applicants have amended claim 1 to read that the cooling bladder is external to the plurality of electrochemical cells. Clearly, Brinkman et al. recite “cooling elements arranged above the plates, within the electrolyte” (column 1, lines 7-9). Also Brinkman et al. states (column 2, lines 62-63) that the invention is “utilizing cooling elements immersed in the electrolyte above the plates”. In addition Figures 1 and 2 show two different configurations of cooling bladders within an electrochemical cell in the electrolyte. In column 3, lines 29-33, Brinkman et al. recites “As shown in FIGS. 1 and 2, the cooling elements 3 are so arranged in the individual storage battery cells 2 that they are permanently submerged in the electrolyte”. Clearly Brinkman et al. has a limitation of having the cooling bladder situated within the electrolyte and, furthermore, inside of the electrochemical cell. In order to establish a prima facie case of obviousness of a claim, all the claim limitations must be taught or suggested by the prior art. (MPEP § 2143.03) Neither Verhoog, nor Brinkman suggest that the cooling bladder is external to the electrochemical cells. With the amended claim 1 it is improper to combine the

deformable cooling bladder of Brinkman that is in the electrolyte with the cooling tank of Verhoog. Therefore the Applicants assert that the rejection of amended claim 1 under 35 USC § 103(a) as being unpatentable over Verhoog (U.S. 6,296,968 B1) in view of Brinkman et al. (U.S. 4,007,315) has been overcome and should be withdrawn. Claims 2-15, 17, 20-24 and 27-31 are dependent upon claim 1 and with the amendment to claim 1 the Applicants assert that these claims have now also overcome the rejections under 35 USC § 103(a) as being unpatentable over Verhoog (U.S. 6,296,968 B1) in view of Brinkman et al. (U.S. 4,007,315) should be withdrawn.

Similarly, claims 18 and 19 that were rejected under 35 USC § 103(a) as being unpatentable over Verhoog (U.S. 6,296,968 B1) in view of Brinkman et al. (U.S. 4,007,315) depend upon claim 1 and therefore Applicants request that the Examiner withdraw this rejection for at least the reasons stated above now that claim 1 has been amended.

Claim 16 stands rejected under 35 USC § 103(a) as being unpatentable over Verhoog (U.S. 6,296,968 B1) in view of Brinkman et al. (U.S. 4,007,315) as applied to claims 1-3, 19-24, 27-31 and in further view of Fitts et al. (U.S. 2002/015333). Applicants could not locate the Fitts et al. reference as recorded in the final Office Action and are assuming that the Examiner meant Fitts et al. (U.S. 2002/015333). With amended claim 1, Applicants assert that the rejection of claim 16 no longer is proper and requests that the Examiner withdraw this rejection for at least the reasons stated above.

Claims 25 and 26 stand rejected under 35 USC § 103(a) as being unpatentable over Verhoog (U.S. 6,296,968 B1) in view of Brinkman et al. (U.S. 4,007,315) as applied to claims 1-13, 19-24, 27-31 and in further view of Gyoten et al. (U.S. 2001/0036567). With amended claim 1, Applicants assert that the rejections of claims 25 and 26 no longer are proper and request that the Examiner withdraw this rejection for at least the reasons stated above.

Claims 2-31 each add additional features to claim 1. Claim 1 is patentable for the reasons given above. Thus, claims 20-31 are likewise patentable.

In summary, now that claim 1 has been amended, the rejection of claims 1-31 under 35 USC § 103(a) has been overcome and should be withdrawn.

Examiner Interview

The applicants wish to thank Examiner Chu for her willingness to discuss the rejections under 35 USC § 103(a) after a final Office Action. The discussion was very helpful to the Applicants.

Fees

- ☐ Any required fee will be made at the time of submission via EFS-Web. In the event fees are not or cannot be paid at the time of EFS-Web submission, please charge any fees under 37 CFR § 1.17 which may be required to Deposit Account No. 13-3723.
- ☐ Please charge any fees under 37 CFR §§ 1.16 and 1.17 which may be required to Deposit Account No. 13-3723. (One copy of this sheet marked duplicate is enclosed.)
- ☒ Please charge any additional fees associated with the prosecution of this application to Deposit Account No. 13-3723. This authorization includes the fee for any necessary extension of time under 37 CFR § 1.136(a). To the extent any such extension should become necessary, it is hereby requested.
- ☒ Please credit any overpayment to the same deposit account.

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested.

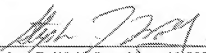
Allowance of claims 1-31, as amended, at an early date is solicited.

Respectfully submitted,

Date

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